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Docket No.: 2257-0156P  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Koichi TAKEUCHI

**Before the Board of Appeals**

Application No.: 09/633,778

Confirmation No.: 003857

Filed: August 7, 2000

Art Unit: 2617

For: DIGITAL BROADCAST RECEIVING  
SYSTEM

Examiner: J.R. Sheleheda

**REPLY TO NOTICE OF NON-COMPLIANT APPEAL BRIEF**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Responsive to the October 18, 2006, Notification of Non-Compliant Appeal Brief, attached hereto is a corrected version of the "Appeal Brief" submitted on October 5, 2006.

The present submission is being timely filed within thirty (30) days of the mailing date of the Notice. Accordingly, no extension of time fees are required.

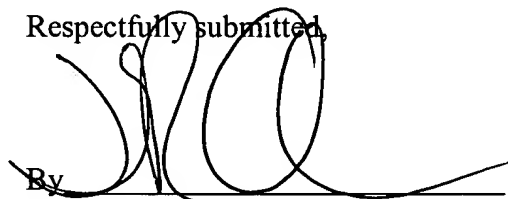
A full and complete response has been made to all issues as cited in the Notification of Non-Compliant Appeal Brief. Applicants have taken substantial steps in efforts to advance prosecution of the present application. Thus, Applicants respectfully request that a timely Notice of Allowance issue for the present case.

Should the Examiner have any questions regarding this matter, he is respectfully requested to contact Ali M. Imam (Reg. No.58,755), who may be reached in the Washington, DC, area at (703) 205-8000.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: November 7, 2006

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'D. Richard Anderson', written over a horizontal line.

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Docket No.: 2257-0156P  
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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In re Patent Application of:  
Koichi TAKEUCHI

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Application No.: 09/633,778

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Art Unit: 2617

For: DIGITAL BROADCAST RECEIVING  
SYSTEM

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Examiner: J. R. Sheleheda

**APPEAL BRIEF**

MS Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

As required under § 41.37(a), this brief is filed after the Notice of Appeal filed in this case on June 6, 2006, and is in furtherance of said Notice of Appeal.

The fees required under § 41.20(b)(2), and any required petition for extension of time, if applicable, for filing this brief and fees related thereto, are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

This brief contains items under the following headings as required by 37 C.F.R. § 41.37 and

M.P.E.P. § 1206:

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Application No. 09/633,778

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Koichi TAKEUCHI

**Before the Board of Appeals**

Application No.: 09/633,778

Confirmation No.: 3857

Filed: August 7, 2000

Art Unit: 2617

For: DIGITAL BROADCAST RECEIVING  
SYSTEM

Examiner: J.R. Sheleheda

**APPEAL BRIEF ON BEHALF OF APPELLANT: Koichi TAKEUCHI**

MS Appeal Brief – Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**I. REAL PARTY IN INTEREST**

The real party in interest for this application is the Assignee, Mitsubishi Denki Kabushiki Kaisha, 2-3, Marunouchi 2-chome, Chiyoda-ku, Tokyo, Japan 100-8310.

**II. RELATED APPEALS AND INTERFERENCES**

There are no related appeals or interferences that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### **III. STATUS OF CLAIMS**

Claims 1, 6-11, 14-16, 19, 20, and 25-43 are currently pending in this application wherein claims 2-5, 12, 13, 17, 18, and 21-24 have been canceled. Claims 1, 11, 16, 20, 30, 33, 35, and 41 are independent. The final Office Action dated February 08, 2006 rejects claims 1, 6, 8-11, 16, 20, 25, 27-30, 33, 35, 36, and 38-41 under 35 USC 103(a) as being unpatentable over *Blatter* et al. (US 6,016,348) in view of *Ohishi* et al. (US 5,909,257). The final Office Action dated February 08, 2006 also rejects claims 7, 14, 15, 19, 26, 31, 32, 34, 37, 42, and 43 under 35 USC 103(a) as being unpatentable over *Blatter* et al. (US 6,016,348) and *Ohishi* et al. (US 5,909,257) as applied to claims 1, 11, 20, 30, 33, 35 and 41 above, and further in view of *Freimann* (US 6,604,243).

Claims 1, 6-11, 14-16, 19, 20, and 25-43 are the subject of the present appeal.

### **IV. STATUS OF AMENDMENTS**

In a reply after final under 37 C.F.R. § 1.116 dated June 07, 2006, claim 16 was amended to correct a minor typographical error, e.g., replacing "the" with "a" before "program" which is reflected in the claim appended hereto (please see Appendix A1). Note that Appellant has not yet received any indication from the Examiner whether this amendment had been entered. Since this amendment merely corrects a minor typographical error, Appellant assumes that the Examiner will enter the amendment. The Amendment previously presented on November 30, 2005 had been entered.

### **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

With respect to independent claim 1, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2), a storing unit by which the packet stream passing through the

packet filter is stored (see also present specification, page 15, line 12 - page 16, line 24). Also included is an information table generator (Fig. 1, element 7) that generates, with respect to a PAT (program association table) (see Fig. 2) in various information tables contained in the packet stream, a new PAT containing information only on a program to be stored in the storing unit and an information table substitution unit (Fig. 1, element 3) by which the new PAT is substituted for an information table corresponding to the PAT contained in the packet stream transmitted (see also present specification, page 17, line 16 - page 18, line 23). The packet filter (Fig. 1, element 2) filters, of a plurality of PMTs (program mapping tables) contained in the packet stream transmitted, an information table other than a PMT related to the program to be stored. The information table generator (Fig. 1, element 7) has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The information table generator (Fig. 1, element 7) also has a function with which the value of the program number of a program recorded in the record and reproduction unit (Fig. 1, element 4). The information table substitution unit (Fig. 1, element 3) has a function with which the specific value is substituted for the PID value of a packet for transmitting an ES contained in the packet stream transmitted (see present specification, page 25, lines 8-23). The recording also retains the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

With respect to independent claim 11, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2), a storing unit by which the packet stream passing through the packet filter is stored (see also present specification, page 15, line 12 - page 16, line 24). Also included is an information table generator (Fig. 1, element 7) that generates a new information table with respect to a specific information table and includes an information insertion unit (Fig. 11, element 3a; see present specification, page 17, line 16 - page 18, line 23 and page 34, lines 2-14). The packet filter (Fig. 1, element 2) filters, of a plurality of PMTs (program mapping tables) contained in the packet stream transmitted, an information table other than a PMT related to

the program to be stored. The information table generator (Fig. 1, element 7) has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The information table insertion unit (Fig. 11, element 3a) has a function with which the specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT (see present specification, page 36, lines 2-16). The recording also retains the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

With respect to independent claim 16, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2), a storing unit by which the packet stream passing through the packet filter is stored (see also present specification, page 15, line 12 - page 16, line 24). Also included is an information table generator (Fig. 1, element 7) and an output information insertion unit (Fig. 20, element 16) by which the new PAT is substituted for an information table corresponding to the PAT contained in the packet stream transmitted (see also present specification, page 17, line 16 - page 18, line 23). The information table generator (Fig. 1, element 7) has a function with which the value of a program number of a program recorded in the record and reproduction unit is subjected to an arbitrary alteration to generate a predetermined information table (see present specification, page 63, line 10 - page 64, line 15).

With respect to independent claim 20, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2). Also included is an information table generator (Fig. 1, element 7) that generates, with respect to a PAT (program association table) (see Fig. 2) in various information tables contained in the packet stream, a new PAT containing information only on a program to be stored in the storing unit and an information table substitution unit (Fig. 1, element 3) by which the new PAT is substituted for an information table corresponding to the PAT



contained in the packet stream transmitted (see also present specification, page 17, line 16 - page 18, line 23). The packet filter (Fig. 1, element 2) filters, of a plurality of PMTs (program mapping tables) contained in the packet stream transmitted, an information table other than a PMT related to the program to be stored. The information table generator (Fig. 1, element 7) has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The information table generator (Fig. 1, element 7) also has a function with which the value of the program number of a program recorded in the record and reproduction unit (Fig. 1, element 4). The information table substitution unit (Fig. 1, element 3) has a function with which the specific value is substituted for the PID value of a packet for transmitting an ES contained in the packet stream transmitted (see present specification, page 25, lines 8-23). The recording also retains the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

With respect to independent claim 30, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2), a storing unit by which the packet stream passing through the packet filter is stored (see also present specification, page 15, line 12 - page 16, line 24). Also included is an information table generator (Fig. 1, element 7) that generates a new information table with respect to a specific information table and includes an information insertion unit (Fig. 11, element 3a; see present specification, page 17, line 16 - page 18, line 23 and page 34, lines 2-14). The packet filter (Fig. 1, element 2) filters, of a plurality of PMTs (program mapping tables) contained in the packet stream transmitted, an information table other than a PMT related to the program to be stored. The information table generator (Fig. 1, element 7) has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The information table insertion unit (Fig. 11, element 3a) has a function with which the specific value is substituted for the PID value of a packet transmitting an

ES contained in the packet stream transmitted (see present specification, page 36, lines 2-16). The recording also retains the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

With respect to independent claim 33, the claimed invention is directed to a method of receiving a digital broadcast which includes demodulating a digital broadcast signal (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, filtering by using a packet filter (Fig. 1, element 2), generating, with respect to a PAT (program association table) (see Fig. 2) in various information tables contained in the packet stream, a new PAT containing information only on a program to be stored in the storing unit and substituting the new PAT is substituted for an information table corresponding to the PAT contained in the packet stream transmitted (see also present specification, page 17, line 16 - page 18, line 23). The method includes substituting a specific value for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The method further includes retaining the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

With respect to independent claim 35, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2), a reproducing unit by which the packet stream passing through the packet filter is stored (see also present specification, page 15, line 12 - page 16, line 24). Also included is an information table generator (Fig. 1, element 7) that generates, with respect to a PAT (program association table) (see Fig. 2) in various information tables contained in the packet stream, a new PAT containing information only on a program to be stored in the storing unit and an information table substitution unit (Fig. 1, element 3) by which the new PAT is substituted for an information table corresponding to the PAT contained in the packet stream transmitted (see also present specification, page 17, line 16 - page 18, line 23). The packet filter (Fig. 1, element 2) filters, of a plurality of PMTs (program mapping tables) contained in the packet

stream transmitted, an information table other than a PMT related to the program to be stored. The information table generator (Fig. 1, element 7) has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The information table generator (Fig. 1, element 7) also has a function with which the value of the program number of a program recorded in the record and reproduction unit (Fig. 1, element 4). The information table substitution unit (Fig. 1, element 3) has a function with which the specific value is substituted for the PID value of a packet for transmitting an ES contained in the packet stream transmitted (see present specification, page 25, lines 8-23). The recording also retains the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

With respect to independent claim 41, the claimed invention is directed to a digital broadcast receiving system which includes a receive and demodulation section (Fig. 1, element 1) by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream, a packet filter (Fig. 1, element 2), a reproducing unit by which the packet stream passing through the packet filter is stored (see also present specification, page 15, line 12 - page 16, line 24). Also included is an information table generator (Fig. 1, element 7) that generates a new information table. The information table generator (Fig. 1, element 7) has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in the PMT in order to generate the PMT (see present specification, page 23, line 9 - page 24, line 6). The information table generator (Fig. 1, element 7) also has a function with which the value of the program number of a program recorded in the record and reproduction unit (Fig. 1, element 4). The recording also retains the specific value such that the reproducing unit may reproduce the packet stream without first verifying the contents of the PMT and PAT (see present specification, page 45, lines 7-10).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The Final Office Action provides the following ground of rejection for review on appeal:

(a) claims 1, 6, 8-11, 16, 20, 25, 27-30, 33, 35, 36, and 38-41 are rejected under 35 USC 103(a) as being unpatentable over *Blatter* et al. (US 6,016,348) (hereinafter "*Blatter*") in view of *Ohishi* et al. (US 5,909,257) (hereinafter "*Ohishi*").

(b) claims 7, 14, 15, 19, 26, 31, 32, 34, 37, 42, and 43 are rejected under 35 USC 103(a) as being unpatentable over *Blatter* and *Ohishi* as applied to claims 1, 11, 20, 30, 33, 35 and 41 above, and further in view of *Freimann* (US 6,604,243) (hereinafter "*Freimann*").

## **VII. ARGUMENTS**

### **A. The Examiner's Rejection under *Blatter* in view of *Ohishi* Fails to Establish *Prima Facie* Obviousness of Independent Claims 1, 11, 16, 20, 30, 33, 35, and 41**

#### **1. Argument Summary**

The Examiner's reasoning provided in support of the rejection of independent claims 1, 11, 16, 20, 30, 33, 35, and 41 under 35 U.S.C. §103(a) as being obvious under the combination of *Blatter* in view of *Ohishi* fails to establish *prima facie* obviousness. Specifically, the deficiencies of the rejection are at least in that the examiner has failed to provide that there is motivation to combine *Blatter* and *Ohishi* and that the references teach or suggest all of the claim features.

#### **2. Legal Requirements of *Prima Facie* Obviousness**

To establish *prima facie* obviousness, all claim limitations must be taught or suggested by the prior art and the asserted modification or combination of the prior art must be supported by some teaching, suggestion, or motivation in the applied references or in knowledge generally available to one skilled in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). The prior art must suggest the desirability of the modification in order to establish a *prima facie* case of obviousness. *In re Brouwer*, 77 F.3d 422, 425, 37 USPQ2d 1663, 1666 (Fed. Cir. 1995). It can also be said that the prior art must collectively suggest or point to the claimed invention to support a finding of obviousness. *In re Hedges*, 783 F.2d 1038, 1041, 228 USPQ 685, 687 (Fed. Cir. 1986); *In re Ehrreich*, 590 F.2d 902, 908-909, 200 USPQ 504, 510 (C.C.P.A. 1979).

The teaching or suggestion to make the asserted combination or modification of the primary reference must be found in the prior art and cannot be gleaned from Appellant's disclosure. *In re*

*Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In other words, the use of hindsight to reconstruct the claimed invention is impermissible. *Uniroyal Inc. v. Rudlan-Wiley Corp.*, 5 USPQ 1434 (Fed. Cir. 1983).

Furthermore, when considering the differences between the primary reference and the claimed invention, the question for assessing obviousness is not whether the differences themselves would have been obvious, but instead whether the claimed invention as a whole would have been obvious. *Stratoflex Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983).

**3. The combination of *Blatter* and *Ohishi* fails to teach an information table generator that substitutes a specific value for a PID value to generate a PMT**

The February 08, 2006 final Office Action contains a Response to Arguments section that is quite instructive both in terms of the Office Action's insufficiency and in terms of Appellant's efforts to advance prosecution despite the Office Action's insufficiencies.

First of all, the final Office Action continues to respond to one of Appellant's arguments, namely that there is no disclosure or suggestion in any of the applied art of an information table generator that substitutes a specific value for a PID value to generate a PMT and that instead, *Ohishi* generates PSSIs not new PMTs. In response to this argument, the Office Action states in part:

"*Blatter* does not specifically mention altering the PID values in the PMT table. *Ohishi* was relied upon to teach taking a PMT table and then substituting a specific value for the PID value when generating the new table. As *Blatter*, as the primary reference, already discloses receiving and storing a PMT table for recorded programs, the teachings of *Ohishi* are only relied upon in regards to the altering of PID values contained within the PMT. Utilizing the specific reasoning and benefit behind altering the PID values indicted in the PMT tables (see *Ohishi* at column 11, line 30 - column 12, line 30 and the rejections above), it is the combination results in creating a new PMT for a recorded program (as indicated by *Blatter*) wherein the PID values are changed (as taught by *Ohishi*). Any additional teachings provided by *Ohishi* unrelated to this feature and benefit do not negate the resulting combination and benefits therein."<sup>1</sup>

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<sup>1</sup> See page 27, section 5.a.i. of the Office Action

Appellant respectfully submits that the specific types of tables *Ohishi* generates are indeed relevant not unrelated, particularly because many of the independent claims more specifically identify the various tables utilized and processed by the invention.

The final Office Action and previous Office Actions clearly admitted that the primary reference (*Blatter*) fails to disclose an information table generator which substitutes a specific value for the PID value of a packet for transmitting an ES (elementary stream) described in the PMT thereby to generate the PMT (program mapping table). These Office Actions also admitted that the primary reference (*Blatter*) also fails to disclose a recording section for retaining the specific value.

To supply this missing teaching, the Office Action applies *Ohishi*. Even assuming the Office Action's allegation is correct and that a specific default value is substituted for the PID values of video and audio streams to generate a new PSSI table, such a teaching would fail to remedy the noted deficiencies in *Blatter*, particularly as recited in the independent claims.

Indeed, *Ohishi* merely utilizes default values to identify specific PID packets in the PSSI. **There is no disclosure or suggestion in any of the applied art even taken in combination of an information table generator that substitutes a specific value for a PID value to generate a PMT.** It is wholly insufficient to point out that the specific types of tables *Ohishi* generates are not related particularly in the face of specific tables being referred to in the claims. Claim 1 requires generation of a PMT (program mapping table) and not a PSSI as alleged by the Office Action. The generation of the PMT by the claimed information table generator substitutes a specific value for the PID value of a packet for transmitting an elementary stream described in the PMT. Such a process generates a PMT, not a PSSI.

Returning to the primary reference *Blatter*, the final Office Action alleges that *Blatter*'s manipulation of a yet different table (the CAT (conditional association table)) somehow teaches the generation of a PMT while conveniently ignoring that these are wholly different tables. To supply this missing teaching, the final Office Action turns to *Ohishi* which manipulates the PSSI not a CAT or a PMT. The Examiner states:

"... is once again noted that *Ohishi* merely discloses taking a PMT table, altering the data to have new PID values and then putting the data into a new table (column 11,

line 35 - column 12, line 14). The mere fact that *Ohishi* gives the newly created table a new name (PSSI) does not negate the basic fact that this is the same table as the PMT and is utilized for the same purpose of identifying the PIDs where the video and audio of the program are located (see column 11, line 35 - column 12, line 14 and Figs. 18 and 19)."<sup>2</sup>

Merely stating that *Ohishi* gives the newly created table a new name (PSSI) does not fill in the deficiencies of *Blatter* as demonstrated above. Appellant respectfully submits that the rejection ignores specific claim language, skirts the real issues, and results in an extremely weak and unsubstantiated rejection.

Returning to the Office Action, it is clear that the applied art certainly fails to disclose or suggest the invention recited in the independent claims.

In regard to independent claims 1, 20 and 35 it is clear that *Blatter* fails to disclose or suggest the claimed information table generator that generates, with respect to a PAT (program association table), a new PAT containing information only on a program to be recorded in the storing unit. The final Office Action alleges that *Blatter's* CAT table manipulations teach this feature. Appellant respectfully submits that *Blatter* simply fails to disclose or suggest any such information table generator that generates a new PAT containing information only on a program to be recorded in the storing unit as further recited in independent claims 1, 20 and 35.

Likewise, *Blatter* also fails to disclose or suggest the information table substitution unit of claims 1, 20, and 35 which further recites that the new PAT is substituted for an information table corresponding to the PAT contained in the packet stream transmitted. The Office Action utilizes the CAT table manipulation of *Blatter* to reject this feature but it is quite clear that the information table substitution unit of the claims is distinct from these simple CAT manipulations.

With respect to independent claims 11 and 30, the combination of *Blatter* and *Ohishi* also fails to disclose or suggest a recording section for recording a program information index generated based on information contained in various information tables which are extracted from the packet stream. The Office Action points to the full PSI as allegedly teaching this feature but it is clear that the full PSI is a table that is received intact (see column 7, lines 58-63 stating that the received packet contains the PSI which is simply buffered in unit 60). Thus, even if the PSI is equivalent to

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<sup>2</sup> See pages 27-28, section 5.a.ii. of the final Office Action.

the claimed program information index, *Blatter* does not generate this PSI based on information contained in various information tables which are extracted from the packet stream. Instead, *Blatter* merely buffers the PSI and performs no generation of a program information index as claimed.

Further in regards to independent claims 11 and 30, the combination of applied art fails to disclose or suggest substituting a specific value for PID value of a packet transmitting an elementary stream described in a program mapping table. This substitution is performed in the program information index. Similar to the arguments above, *Blatter's* manipulations of the CAT table and *Ohishi's* manipulations of the PSSI table fails to disclose or suggest these specific value substitutions for the PID value of a packet transmitting an elementary stream described in a PMT, in the program information index.

Furthermore, *Blatter* and *Ohishi* also fail to disclose or suggest that in the generating step a specific value is substituted for the PID value of a packet for transmitting an elementary stream described in the PMT to generate the PMT or that in the substituting step the specific value is substituted for the PID value of a packet for transmitting an elementary stream contained in the packet stream transmitted as further recited in independent claim 33.

Further in regards to independent claim 33, the combination of *Blatter* and *Ohishi* also fail to disclose or suggest the method recited therein. Specifically, neither *Blatter* nor *Ohishi* generates, with respect to a PAT (program association table) a new PAT containing information only on a program to be recorded or reproduced or substituting the new PAT for an information table corresponding to the PAT contained in the packet stream transmitted. No such generation or substitution is performed or suggested by the combination of *Blatter* and *Ohishi*.

In regard to claim 41, Appellant reasserts the arguments above in relation to claims 11 and 30 concerning the program information index which is a feature that is not generated based on information contained in various information tables extracted from the packet stream. Likewise, the specific value substitution is another feature in common with claims 11 and 30 which such feature is also completely absent from and not suggested by the combination of *Blatter* and *Ohishi*.

4. **The combination of *Blatter* and *Ohishi* fails to teach a recording section for retaining the specific values such that subsequent reproduction of**



**the package stream may be performed without first verifying the contents of the PMT and the PAT**

As mentioned above, the final Office Action admitted that *Blatter* also fails to disclose a recording section for retaining the specific value. Appellant respectfully submits that the combination of *Blatter* and *Ohishi* also fails to disclose or suggest a recording section for retaining the specific values such that subsequent reproduction of the package stream may be performed **without first verifying the contents of the PMT and the PAT**. The applied art, even when taken in combination, fails to disclose or suggest any such recording section that would enable subsequent reproduction of the packet stream without first verifying the contents of the PMT and the PAT. Recall also that the "specific value" is the value substituted for the PID value of a packet for transmitting an elementary stream described in the PMT and which is thereby utilized to generate the PMT by the information table generator. *Ohishi's* PSSI manipulations and *Blatter's* CAT table manipulations simply fail to disclose or suggest any such combination of features, particularly as recited in independent claims 1 and 20.

Further in regard to independent claim 35, the applied art fails to disclose or suggest a recording section for retaining the specific value such that the reproducing unit may reproduce the packet stream without first verifying the contents of the PMT or PAT.

Still further, *Blatter* and *Ohishi* also fail to disclose or suggest the step of retaining the specific value (the one substituted for the PID value) in the substituting step of independent claim 33. Particularly, the applied art fails to disclose or suggest retaining this said specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT. No such functionality is disclosed or suggested by the applied art.

Further in regards to independent claims 11 and 30, the combination of applied art fails to disclose or suggest substituting a specific value for PID value of a packet transmitting an elementary stream described in a program mapping table. This substitution is performed in the program information index. Similar to the arguments above, *Blatter's* manipulations of the CAT table and *Ohishi's* manipulations of the PSSI table fails to disclose or suggest these specific value

substitutions for the PID value of a packet transmitting an elementary stream described in a PMT, in the program information index.

Still further, neither *Blatter* nor *Ohishi* even when taken in combination discloses or suggests a recording section for retaining the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the contents of the PMT and PAT as recited in independent claims 11 and 30. Conventional art like *Ohishi* and *Blatter* must still verify the PMT and PAT and only the invention permits such subsequent reproduction without first verifying the contents of PMT and PAT. In response to this argument, the Examiner alleges: "a computer system reproducing content utilizing PSI tables is clearly capable of performing the reproduction without verifying and would thus meet the current broad claim limitations."<sup>3</sup> Appellant respectfully submits that such allegation has no merit because there is no specific support for this statement in *Blatter* or *Ohishi*.

Moreover, in regard to claim 41, the applied art combination fails to disclose or suggest a recording section for retaining the specific value such that the reproducing unit may reproduce the packet stream without first verifying the contents of the PMT and PAT.

**5. The combination of *Blatter* and *Ohishi* fails to teach altering a program number**

With respect to independent claim 16, Appellant submits that neither *Blatter* nor *Ohishi* teaches or suggest the alteration of the program\_number. Although *Ohishi* may disclose altering the PID value, *Ohishi* simply does not disclose or suggest altering the program\_number. Even more specifically, *Ohishi* even when taken in combination with *Blatter* fails to disclose or suggest an information table generator that has a function with which the value of the program\_number of a program recorded is subject to an arbitrary alteration to generate said predetermined information table. Neither does the applied art disclose or suggest an output information insertion unit having a function with which the value obtained by the alteration of the program\_number is provided to the packet stream transmitted. Without any disclosure or suggestion for altering the PID value, the

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<sup>3</sup> See page 30, section 5.g. of the final Office Action.

applied art simply cannot disclose or suggest the claimed information table generator or output information insertion unit as now recited in independent claim 16. Furthermore, it is respectfully submitted that claim 16 requires altering both PID and program\_number which is not taught by any of the applied references.

**6. There is no motivation to combine *Blatter* and *Ohishi***

The final Office Action continues to ignore the fact that *Blatter* and *Ohishi* are directed to different purposes and that combining them, as the Office Action suggests, is truly an exercise in hindsight reconstruction. Indeed, the Examiner's argument that *Ohishi*'s tables are not related clearly shows that the Examiner is haphazardly combining references without proper motivation and must be utilizing the specification as a guide to combine the disparate teachings of *Ohishi* and *Blatter*.

Obviousness cannot be established by hindsight combination to produce the claimed invention. *In re Gorman*, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed.Cir.1991). It is the prior art itself, and not the Appellant's achievement, that must establish the obviousness of the combination. Therefore, Appellant submits that the only motivation to make such modifications to *Blatter* and *Ohishi* is based on an impermissible hindsight reference to Appellant's specification.

Appellant respectfully submits that an analysis of the propriety of any rejection under 35 U.S.C. § 103(a) begins with the text of that section, particularly the phrase "at the time that the invention was made." It is this phrase which guards against entry into the "tempting but forbidden zone of hindsight." *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1616 (Fed. Cir. 1999). Measuring a claimed invention against the standard established by Section 103 "requires the often difficult but critical step of casting the mind back to the time of the invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then accepted wisdom in the field." *Id.*, 50 U.S.P.Q.2d at 1617.

The Federal Circuit has made it very clear that "the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.

Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosures as a blueprint for piecing together the prior art to defeat patentability - the essence of hindsight." *Id.*

The required "evidence" of a teaching, suggestion or motivation to make the cited combination of references can be found in the prior art references themselves (the most typical location), the knowledge of one of ordinary skill in the art, or in some cases, from the nature of the problem to be solved. *Id.* The range of potential sources; however, does nothing to diminish the requirement for actual evidence. "The showing must be clear and particular" and cannot be met by broad conclusory statements. *Id.*

There is simply no evidence of record in this application that provides any teaching, suggestion or motivation to so modify the cited prior art reference, let alone a showing that is "clear and particular" as it must be. See, e.g., *In re Dembiczak*, supra, 50 U.S.P.Q.2d at 1617. Hence, to the limited extent that the cited reference might be modified so as to accomplish Appellant's claimed invention (a fact that Appellant strongly contends, supra, cannot be done), it is only through the "blueprint drawn by the inventor," *Interconnect Planning Corp. v. Feil*, 227 U.S.P.Q. 543, 547 (Fed. Cir. 1985), that that combination can be assembled, not from the state of the art at the time of Appellant's invention as it must be.

It is respectfully submitted that the two cited prior art references taken either alone or in combination do not recognize the problem solved by the Appellant's claimed invention or include all the features of independent claims 1, 11, 16, 20, 30, 33, 35, and 41 as demonstrated above. More specifically, the Appellant's claimed invention solves the unrecognized problem of conventional digital broadcast receiving system in which redundant data is directly recorded in a record and reproduction unit, thereby reducing space for recording (please see page 4, lines 5-10 of the specification). In order to solve such problem, the claimed invention requires an information table generator that substitutes a specific value for a PID value to generate a PMT, as illustrated in the claims. Moreover, it is respectfully submitted that only a person skilled in the art who had access to the present application would be motivated to combine the teachings of the four cited prior art references in order to solve the unrecognized problem disclosed in Appellant's specification. In

other words, the only motivation to combine the two cited references in the way suggested in the Office Action is gleaned from the hindsight provided by Appellant's specification.

The Appellant again respectfully submits that the Office Action is based upon a selective combination of features found in the two references, and that such selective combining is impermissible. As stated in *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 (Fed. Cir. 1985), "When prior art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself." It is respectfully submitted that the Office Action cites the *Blatter* patent, and then utilizes the present application as a road map to selectively replace various features of the *Blatter* reference.

The Office Action admits that *Blatter* does not disclose that the first table is a PAT table, wherein a specific value is substituted for the PID value of a packet for transmitting an ES described in the PMT, wherein the specific value is substituted for the PID value of a packet for transmitting a ES contained in the packet stream transmitted, and a recording section for retaining the specific value such that subsequent reproduction of the packet stream may be performed without first verifying the content of the PMT and PAT, but alleges that it would be obvious to combine *Blatter* and *Ohishi* to ensure that the PAT table only refers to programs which were recorded and are available for playback and eliminating the need to modify a plurality of tables by creating a single default table.<sup>4</sup> It is respectfully submitted that the rejection of claims 1, 11, 16, 20, 30, 33, 35, and 41 is a blatant string of substitutions gleaned from and motivated by the Appellant's own patent application. As mentioned above, the Office Action has not shown that the prior art provides the teaching or suggestion to make the claimed combination and the reasonable expectation of success. The suggestion to make the claimed combination and the reasonable expectation of success cannot be based on Appellant's disclosure.

Accordingly, it is respectfully submitted that claims 1, 11, 16, 20, 30, 33, 35, and 41 are patentable over the impermissible combination of references cited against the claims.

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<sup>4</sup> See page 4, 2<sup>nd</sup> paragraph and page 5, 1<sup>st</sup> paragraph of the final Office Action.

For all the above reasons, taken alone or in combination, Appellant respectfully requests reconsideration and withdrawal of the §103 *Blatter-Ohishi* rejection.

**B. The Examiner's Rejection under *Blatter* in view of *Ohishi*, and further in view of *Freimann* Fails to Establish Prima Facie Obviousness of Dependent Claims 7, 14, 15, 19, 26, 31, 32, 34, 37, 42, and 43**

Dependent claims 7, 14, 15, 19, 26, 31, 32 and 34 stand rejected under 35 USC 103(a) as being unpatentable over *Blatter*, *Ohishi* and further in view of *Freimann*. This rejection, insofar as it pertains to the presently pending claims, is deficient.

Appellant respectfully submits that *Freimann* does not remedy any of the noted deficiencies in the base combination of *Blatter* and *Ohishi*. Indeed, *Freimann* is merely applied to teach the features of certain dependent claims which are not being relied upon for patentability at this time. Therefore, the full combination of *Freimann* with *Blatter* and *Ohishi* fails to disclose or suggest the invention as recited in the independent claims.

Because all of the dependent claims necessarily include the features of their respective independent claims, the dependent claims should be considered allowable at least for the same reasons asserted above for the independent claims.

Appellant respectfully submits that the Examiner has failed to establish a prima facie case of obviousness of all pending claims. Thus, Appellant maintains that claims 1, 6-11, 14-16, 19, 20, and 25-43 are allowable over the combination of *Blatter* and *Ohishi* for at least the reason noted above.

**VIII. CLAIMS**

A copy of the claims involved in the present Appeal is attached hereto as Appendix A1. As mentioned earlier, the Examiner has not yet indicated whether the June 07, 2006 amendment to claim 16 was entered. Since this amendment merely corrects a minor typographical error, Appellant assumes that the Examiner will enter the amendment presented in Appendix A1. In the event that

the Examiner does not enter the Amendment, Appellant presents a copy of the claims without any amendment to claim 16 as Appendix A2 attached hereto.

**IX. EVIDENCE**

There is no additional evidence pursuant to §§ 1.130, 1.131, or 1.132 and/or evidence entered by or relied upon by the Examiner that is relevant to this appeal as noted in Appendix B.

**X. RELATED PROCEEDINGS**

No related proceedings are referenced in II. above, and thus, no copies of decisions in related proceedings are provided.

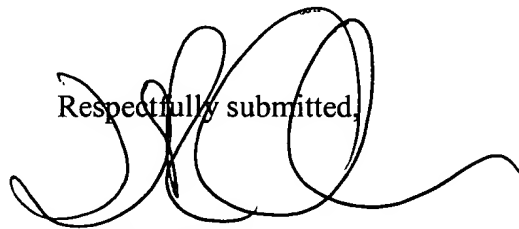
**XI. CONCLUSION**

The withdrawal of the outstanding rejections and the allowance of claims 1, 6-11, 14-16, 19, 20, and 25-43 are earnestly solicited.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R. §§ 1.16, 1.17, and 1.21 that may be required by this paper and to credit any overpayment to Deposit Account No. 02-2448.

Dated: November 6, 2006

Respectfully submitted,



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**APPENDIX A1**

**Claims Involved in the Appeal of Application Serial No. 09/633,778 are as follows:**

1. (Previously presented) A digital broadcast receiving system comprising:
  - a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;
  - a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;
  - a storing unit by which said packet stream passing through said packet filter is stored;
  - an information table generator that generates, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be stored in said storing unit; and
  - an information table substitution unit by which said new PAT is substituted for an information table corresponding to said PAT contained in said packet stream transmitted, said information table substitution unit being disposed between said receive and demodulation section and said storing unit,

wherein said packet filter filters, of a plurality of PMTs (program mapping tables) contained in said packet stream transmitted, an information table other than a PMT related to said program to be stored,

wherein,

said information table generator has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section for retaining said specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and PAT.



2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Original) The digital broadcast receiving system according to claim 1, wherein,  
in said information table generator, a new CAT (Conditional Access Table) containing the encrypted state of said digital broadcast signal is generated with respect to a CAT in said variety of information tables; and  
in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted.
7. (Original) The digital broadcast receiving system according to claim 1, further comprising:  
an information table extractor that extracts at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and  
a recording section that records information contained in either or both of said SDT and said EIT to be extracted by said information table extractor, and wherein,  
said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.
8. (Original) The digital broadcast receiving system according to claim 1, further comprising:  
a control section that controls the operation of receiving said digital broadcast signal; and  
an information table extractor by which, from said packet stream outputted from said receive and demodulation section, a specific SI (Service Information) table in said various

information tables is extracted to inform its contents to said control section, and wherein,  
said packet filter filters said specific SI table contained in said packet stream transmitted.

9. (Original) The digital broadcast receiving system according to claim 1, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

10. (Original) The digital broadcast receiving system according to claim 9, wherein said information table substitution unit performs substitution of said various information tables at the maximum allowable transmission intervals specified for each of said various information tables.

11. (Previously Presented) A digital broadcast receiving system comprising:  
a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;  
a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream; and  
a storing unit by which said packet stream passing through said packet filter is stored, wherein,  
said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be stored in said storing unit;  
said digital broadcast receiving system further comprising a first recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section,  
wherein said program information index is different from said various information tables,  
an information table generator that generates a new information table with respect to a specific information table in said various information tables filtered by said packet filter; and  
an information table insertion unit for inserting said new information table to said packet stream transmitted, disposed between said receive and demodulation section and said storing unit,

wherein a specific value is substituted for the PID value of a packet transmitting an ES described in a PMT, in said program information index

a second recording section for retaining the specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and a PAT; and

said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted.

12. (Cancelled)

13. (Cancelled)

14. (Original) The digital broadcast receiving system according to claim 11, wherein said program information index contains information described in at least one of an SDT and an EIT.

15. (Original) The digital broadcast receiving system according to claim 14, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

16. (Previously presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

a record and reproduction unit by which said packet stream passing through said packet filter is recorded, and said recorded packet stream is reproduced and outputted;

an information table generator for generating a predetermined information table;

an output information insertion unit by which said predetermined information table is

inserted to said packet stream outputted from said record and reproduction unit, thereby to output it as a new packet stream; and

a circuit changing switch that performs a selective switching between said packet stream outputted from said receive and demodulation section, and said new packet stream outputted from said output information insertion unit, thereby performing its transmission to a digital output section wherein,

said packet stream recorded in said record and reproduction unit does not conform to a predetermined standard, and said new packet stream is made to conform to said predetermined standard by inserting said predetermined information table, wherein,

said information table generator has a function with which the PID value of an ES to be described is subjected to an arbitrary alteration, to generate said predetermined information table; and

said output information insertion unit has a function with which the value obtained by said alteration to said PID value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted wherein,

said information table generator has a function with which the value of a program number of a program recorded in said record and reproduction unit is subjected to an arbitrary alteration, to generate said predetermined information table; and

said output information insertion unit has a function with which the value obtained by said alteration to said program number is provided to said packet stream transmitted.

17. (Canceled)

18. (Cancelled)

19. (Original) The digital broadcast receiving system according to claim 16, wherein when said new packet stream is transmitted from said output information insertion unit via said circuit changing switch to said digital output section, at least one of an SDT, EIT, BAT, PCAT (Partial Content Announcement Table), TDT (Time Data Table) and TOT (Time Offset Table) is multiplexed with said new packet stream, and then outputted.

20. (Previously Presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

an information table generator that generates, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be recorded or reproduced; and

an information table substitution unit by which said new PAT is substituted for an information table corresponding to said PAT contained in said packet stream transmitted,

wherein said packet filter filters, of a plurality of PMTs (program mapping tables) contained in said packet stream transmitted, an information table other than a PMT related to said program to be recorded or reproduced,

wherein,

said information table generator has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section for retaining said specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and PAT.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Previously Presented) The digital broadcast receiving system according to claim 20, wherein,

in said information table generator, a new CAT (Conditional Access Table) containing the encrypted state of said digital broadcast signal is generated with respect to a CAT in said variety of information tables; and

in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted.

26. (Previously Presented) The digital broadcast receiving system according to claim 20, further comprising:

an information table extractor that extracts at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and

a recording section that records information contained in either or both of said SDT and said EIT to be extracted by said information table extractor, and wherein, said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.

27. (Previously Presented) The digital broadcast receiving system according to claim 20, further comprising:

a control section that controls the operation of receiving said digital broadcast signal; and

an information table extractor by which, from said packet stream outputted from said receive and demodulation section, a specific SI (Service Information) table in said various information tables is extracted to inform its contents to said control section, and wherein,

said packet filter filters said specific SI table contained in said packet stream transmitted.

28. (Previously Presented) The digital broadcast receiving system according to claim 20, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

29. (Previously Presented) The digital broadcast receiving system according to claim 28, wherein said information table substitution unit performs substitution of said various information tables at the maximum allowable transmission intervals specified for each of said various information tables.

30. (Previously Presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream; and

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be recorded or reproduced; and

said digital broadcast receiving system further comprising a first recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section,

wherein said program information index is different from said various information tables, an information table generator that generates a new information table with respect to a specific information table in said various information tables filtered by said packet filter; and

an information table insertion unit, operatively connected to said receive and demodulation

section, for inserting said new information table to said packet stream transmitted,

wherein a specific value is substituted for the PID value of a packet transmitting an ES described in a PMT, in said program information index

a second recording section for retaining the specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and a PAT; and

said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted.

31. (Previously Presented) The digital broadcast receiving system according to claim 30, wherein said program information index contains information described in at least one of an SDT and an EIT.

32. (Previously Presented) The digital broadcast receiving system according to claim 31, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

33. (Previously presented) A method of receiving a digital broadcast, comprising the steps of:  
demodulating a digital broadcast signal received from the exterior and outputting as a packet stream;

filtering a predetermined packet in a plurality of packets composing said packet stream;

generating, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be recorded or reproduced; and

substituting said new PAT for an information table corresponding to said PAT contained in said packet stream transmitted, wherein

in said filtering step, of a plurality of PMTs (program mapping tables) contained in said packet streams transmitted, an information table other than a PMT related to said program to be



recorded or reproduced is filtered,

in said generating step, a specific value is substituted for the PID value of a packet for transmitting ES (Elementary Stream) described in said PMT to generate said PMT, and

in said substituting step, said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted,

said method of receiving a digital broadcast further comprising the step of retaining said specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and PAT.

34. (Previously Presented) The method of receiving a digital broadcast according to claim 33, further comprising the steps of:

extracting at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and

recording information contained in either or both of said SDT and said EIT to be extracted in said extracting step; wherein

in said filtering step, one or both of said SDT and said EIT contained in said packet stream transmitted which is (are) extracted in said extracting step is (are) filtered.

35. (Previously presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

a reproducing unit by which said packet stream passing through said packet filter is reproduced;

an information table generator that generates, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be reproduced by said reproducing unit; and

an information table substitution unit by which said new PAT is substituted for an information table corresponding to said PAT contained in said packet stream transmitted, said information table substitution unit being disposed between said receive and demodulation section and said reproducing unit,

wherein said packet filter filters, of a plurality of PMTs (program mapping tables) contained in said packet stream transmitted, an information table other than a PMT related to said program to be reproduced, wherein,

said information table generator has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section for retaining said specific value such that said reproducing unit may reproduce the packet stream without first verifying the contents of said PMT and PAT.

36. (Previously Presented) The digital broadcast receiving system according to claim 35, wherein,

in said information table generator, a new CAT (Conditional Access Table) containing the encrypted state of said digital broadcast signal is generated with respect to a CAT in said variety of information tables; and

in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted.

37. (Previously Presented) The digital broadcast receiving system according to claim 35, further comprising:

an information table extractor that extracts at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said

packet stream transmitted; and

a recording section that records information contained in either or both of said SDT and said EIT to be extracted by said information table extractor, and wherein,

said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.

38. (Previously Presented) The digital broadcast receiving system according to claim 35, further comprising:

a control section that controls the operation of receiving said digital broadcast signal; and

an information table extractor by which, from said packet stream outputted from said receive and demodulation section, a specific SI (Service Information) table in said various information tables is extracted to inform its contents to said control section, and wherein,

said packet filter filters said specific SI table contained in said packet stream transmitted.

39. (Previously Presented) The digital broadcast receiving system according to claim 35, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

40. (Previously Presented) The digital broadcast receiving system according to claim 39, wherein said information table substitution unit performs substitution of said various information tables at the maximum allowable transmission intervals specified for each of said various information tables.

41. (Previously Presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream; and

a reproducing unit by which said packet stream passing through said packet filter is reproduced, wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be reproduced in said reproducing unit;

said digital broadcast receiving system further comprising a recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section,

wherein said program information index is different from said various information tables,

an information table generator that generates a new information table with respect to a specific information table in said various information tables filtered by said packet filter; and  
an information table insertion unit for inserting said new information table to said packet stream transmitted, disposed between said receive and demodulation section and said reproducing unit, wherein a specific value is substituted for the PID value of a packet transmitting an ES described in a PMT, in said program information index such that said reproducing unit may reproduce the packet stream without first verifying the contents of the PMT and a PAT; and  
said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted.

42. (Previously Presented) The digital broadcast receiving system according to claim 41, wherein said program information index contains information described in at least one of an SDT and an EIT.

43. (Previously Presented) The digital broadcast receiving system according to claim 42, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

**APPENDIX A2**

**Claims Involved in the Appeal of Application Serial No. 09/633,778 are as follows:**

1. (Previously presented) A digital broadcast receiving system comprising:
  - a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;
  - a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;
  - a storing unit by which said packet stream passing through said packet filter is stored;
  - an information table generator that generates, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be stored in said storing unit; and
  - an information table substitution unit by which said new PAT is substituted for an information table corresponding to said PAT contained in said packet stream transmitted, said information table substitution unit being disposed between said receive and demodulation section and said storing unit,

wherein said packet filter filters, of a plurality of PMTs (program mapping tables) contained in said packet stream transmitted, an information table other than a PMT related to said program to be stored,

wherein,

said information table generator has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section for retaining said specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and PAT.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Original) The digital broadcast receiving system according to claim 1, wherein,  
in said information table generator, a new CAT (Conditional Access Table) containing the encrypted state of said digital broadcast signal is generated with respect to a CAT in said variety of information tables; and  
in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted.

7. (Original) The digital broadcast receiving system according to claim 1, further comprising:  
an information table extractor that extracts at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and  
a recording section that records information contained in either or both of said SDT and said EIT to be extracted by said information table extractor, and wherein,  
said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.

8. (Original) The digital broadcast receiving system according to claim 1, further comprising:  
a control section that controls the operation of receiving said digital broadcast signal; and  
an information table extractor by which, from said packet stream outputted from said

receive and demodulation section, a specific SI (Service Information) table in said various information tables is extracted to inform its contents to said control section, and wherein, said packet filter filters said specific SI table contained in said packet stream transmitted.

9. (Original) The digital broadcast receiving system according to claim 1, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

10. (Original) The digital broadcast receiving system according to claim 9, wherein said information table substitution unit performs substitution of said various information tables at the maximum allowable transmission intervals specified for each of said various information tables.

11. (Previously Presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream; and

a storing unit by which said packet stream passing through said packet filter is stored, wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be stored in said storing unit;

said digital broadcast receiving system further comprising a first recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section,

wherein said program information index is different from said various information tables,

an information table generator that generates a new information table with respect to a specific information table in said various information tables filtered by said packet filter; and an information table insertion unit for inserting said new information table to said packet stream

transmitted, disposed between said receive and demodulation section and said storing unit,

wherein a specific value is substituted for the PID value of a packet transmitting an ES described in a PMT, in said program information index

a second recording section for retaining the specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and a PAT; and

said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted.

12. (Cancelled)

13. (Cancelled)

14. (Original) The digital broadcast receiving system according to claim 11, wherein said program information index contains information described in at least one of an SDT and an EIT.

15. (Original) The digital broadcast receiving system according to claim 14, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

16. (Currently amended) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

a record and reproduction unit by which said packet stream passing through said packet filter is recorded, and said recorded packet stream is reproduced and outputted;

an information table generator for generating a predetermined information table;



an output information insertion unit by which said predetermined information table is inserted to said packet stream outputted from said record and reproduction unit, thereby to output it as a new packet stream; and

a circuit changing switch that performs a selective switching between said packet stream outputted from said receive and demodulation section, and said new packet stream outputted from said output information insertion unit, thereby performing its transmission to a digital output section wherein,

said packet stream recorded in said record and reproduction unit does not conform to a predetermined standard, and said new packet stream is made to conform to said predetermined standard by inserting said predetermined information table, wherein,

said information table generator has a function with which the PID value of an ES to be described is subjected to an arbitrary alteration, to generate said predetermined information table; and

said output information insertion unit has a function with which the value obtained by said alteration to said PID value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted wherein,

said information table generator has a function with which the value of ~~the~~ a program number of a program recorded in said record and reproduction unit is subjected to an arbitrary alteration, to generate said predetermined information table; and

said output information insertion unit has a function with which the value obtained by said alteration to said program number is provided to said packet stream transmitted.

17. (Canceled)

18. (Cancelled)

19. (Original) The digital broadcast receiving system according to claim 16, wherein when said new packet stream is transmitted from said output information insertion unit via said circuit changing switch to said digital output section, at least one of an SDT, EIT, BAT, PCAT (Partial Content Announcement Table), TDT (Time Data Table) and TOT (Time Offset Table) is

multiplexed with said new packet stream, and then outputted.

20. (Previously Presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

an information table generator that generates, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be recorded or reproduced; and

an information table substitution unit by which said new PAT is substituted for an information table corresponding to said PAT contained in said packet stream transmitted,

wherein said packet filter filters, of a plurality of PMTs (program mapping tables) contained in said packet stream transmitted, an information table other than a PMT related to said program to be recorded or reproduced,

wherein,

said information table generator has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section for retaining said specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and PAT.

21. (Canceled)

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Previously Presented) The digital broadcast receiving system according to claim 20, wherein,

in said information table generator, a new CAT (Conditional Access Table) containing the encrypted state of said digital broadcast signal is generated with respect to a CAT in said variety of information tables; and

in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted.

26. (Previously Presented) The digital broadcast receiving system according to claim 20, further comprising:

an information table extractor that extracts at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and

a recording section that records information contained in either or both of said SDT and said EIT to be extracted by said information table extractor, and wherein, said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.

27. (Previously Presented) The digital broadcast receiving system according to claim 20, further comprising:

a control section that controls the operation of receiving said digital broadcast signal; and  
an information table extractor by which, from said packet stream outputted from said receive and demodulation section, a specific SI (Service Information) table in said various

information tables is extracted to inform its contents to said control section, and wherein,  
said packet filter filters said specific SI table contained in said packet stream transmitted.

28. (Previously Presented) The digital broadcast receiving system according to claim 20, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

29. (Previously Presented) The digital broadcast receiving system according to claim 28, wherein said information table substitution unit performs substitution of said various information tables at the maximum allowable transmission intervals specified for each of said various information tables.

30. (Previously Presented) A digital broadcast receiving system comprising:  
a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream; and  
a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;  
wherein,  
said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be recorded or reproduced; and  
said digital broadcast receiving system further comprising a first recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section,  
wherein said program information index is different from said various information tables, an information table generator that generates a new information table with respect to a specific information table in said various information tables filtered by said packet filter; and

an information table insertion unit, operatively connected to said receive and demodulation section, for inserting said new information table to said packet stream transmitted,

wherein a specific value is substituted for the PID value of a packet transmitting an ES described in a PMT, in said program information index

a second recording section for retaining the specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and a PAT; and

said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted.

31. (Previously Presented) The digital broadcast receiving system according to claim 30, wherein said program information index contains information described in at least one of an SDT and an EIT.

32. (Previously Presented) The digital broadcast receiving system according to claim 31, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

33. (Previously presented) A method of receiving a digital broadcast, comprising the steps of:  
demodulating a digital broadcast signal received from the exterior and outputting as a packet stream;

filtering a predetermined packet in a plurality of packets composing said packet stream;

generating, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing information only on a program to be recorded or reproduced; and

substituting said new PAT for an information table corresponding to said PAT contained in said packet stream transmitted, wherein

in said filtering step, of a plurality of PMTs (program mapping tables) contained in said

packet streams transmitted, an information table other than a PMT related to said program to be recorded or reproduced is filtered,

in said generating step, a specific value is substituted for the PID value of a packet for transmitting ES (Elementary Stream) described in said PMT to generate said PMT, and

in said substituting step, said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted,

said method of receiving a digital broadcast further comprising the step of retaining said specific value such that subsequent reproduction of said packet stream may be performed without first verifying the contents of the PMT and PAT.

34. (Previously Presented) The method of receiving a digital broadcast according to claim 33, further comprising the steps of:

extracting at least one of an SDT (Service Description Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and

recording information contained in either or both of said SDT and said EIT to be extracted in said extracting step; wherein

in said filtering step, one or both of said SDT and said EIT contained in said packet stream transmitted which is (are) extracted in said extracting step is (are) filtered.

35. (Previously presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said packet stream;

a reproducing unit by which said packet stream passing through said packet filter is reproduced;

an information table generator that generates, with respect to a PAT (program association table) in various information tables contained in said packet stream, a new PAT containing

information only on a program to be reproduced by said reproducing unit; and

an information table substitution unit by which said new PAT is substituted for an information table corresponding to said PAT contained in said packet stream transmitted, said information table substitution unit being disposed between said receive and demodulation section and said reproducing unit,

wherein said packet filter filters, of a plurality of PMTs (program mapping tables) contained in said packet stream transmitted, an information table other than a PMT related to said program to be reproduced, wherein,

said information table generator has a function with which a specific value is substituted for the PID value of a packet for transmitting an ES (Elementary Stream) described in said PMT, thereby to generate said PMT;

said information table substitution unit has a function with which said specific value is substituted for the PID value of a packet for transmitting an ES contained in said packet stream transmitted; and

said digital broadcast receiving system further comprising a recording section for retaining said specific value such that said reproducing unit may reproduce the packet stream without first verifying the contents of said PMT and PAT.

36. (Previously Presented) The digital broadcast receiving system according to claim 35, wherein,

in said information table generator, a new CAT (Conditional Access Table) containing the encrypted state of said digital broadcast signal is generated with respect to a CAT in said variety of information tables; and

in said information table substitution unit, said new CAT is substituted for a CAT contained in said packet stream transmitted.

37. (Previously Presented) The digital broadcast receiving system according to claim 35, further comprising:

an information table extractor that extracts at least one of an SDT (Service Description

Table) and an EIT (Event Information Table) in said various information tables contained in said packet stream transmitted; and

a recording section that records information contained in either or both of said SDT and said EIT to be extracted by said information table extractor, and wherein,

said packet filter filters, of said SDT and said EIT contained in said packet stream transmitted, one or both which is (are) extracted by said information table extractor.

38. (Previously Presented) The digital broadcast receiving system according to claim 35, further comprising:

a control section that controls the operation of receiving said digital broadcast signal; and

an information table extractor by which, from said packet stream outputted from said receive and demodulation section, a specific SI (Service Information) table in said various information tables is extracted to inform its contents to said control section, and wherein,

said packet filter filters said specific SI table contained in said packet stream transmitted.

39. (Previously Presented) The digital broadcast receiving system according to claim 35, further comprising a timer for controlling the transmission intervals of said various information tables, when said information table substitution unit performs substitution of said various information tables.

40. (Previously Presented) The digital broadcast receiving system according to claim 39, wherein said information table substitution unit performs substitution of said various information tables at the maximum allowable transmission intervals specified for each of said various information tables.

41. (Previously Presented) A digital broadcast receiving system comprising:

a receive and demodulation section by which a digital broadcast signal received from the exterior is demodulated and outputted as a packet stream;

a packet filter that filters a predetermined packet in a plurality of packets composing said



packet stream; and

a reproducing unit by which said packet stream passing through said packet filter is reproduced, wherein,

said packet filter filters, of said plurality of packets, packets other than a packet for transmitting the data related to a program to be reproduced in said reproducing unit;

said digital broadcast receiving system further comprising a recording section for recording a program information index generated based on information contained in various information tables which are extracted from said packet stream outputted from said receive and demodulation section,

wherein said program information index is different from said various information tables,

an information table generator that generates a new information table with respect to a specific information table in said various information tables filtered by said packet filter; and  
an information table insertion unit for inserting said new information table to said packet stream transmitted, disposed between said receive and demodulation section and said reproducing unit, wherein a specific value is substituted for the PID value of a packet transmitting an ES described in a PMT, in said program information index such that said reproducing unit may reproduce the packet stream without first verifying the contents of the PMT and a PAT; and  
said information table insertion unit has a function with which said specific value is substituted for the PID value of a packet transmitting an ES contained in said packet stream transmitted.

42. (Previously Presented) The digital broadcast receiving system according to claim 41, wherein said program information index contains information described in at least one of an SDT and an EIT.

43. (Previously Presented) The digital broadcast receiving system according to claim 42, wherein said program information index further contains information described in a BAT (Bouquet Association Table).

**APPENDIX B**

There is no additional evidence pursuant to §§ 1.130, 1.131, or 1.132 and/or evidence entered by or relied upon by the examiner that is relevant to this appeal.

**APPENDIX C**

There are no related proceedings.